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(12) **United States Patent**
Szabo(10) Patent No.: **US 6,326,962 B1**(45) Date of Patent: ***Dec. 4, 2001**(54) **GRAPHIC USER INTERFACE FOR
DATABASE SYSTEM**(75) Inventor: **Andrew J. Szabo, Dobbs Ferry, NY
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(US)**(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.This patent is subject to a terminal dis-
claimer.(21) Appl. No.: **09/353,305**(22) Filed: **Jul. 13, 1999****Related U.S. Application Data**(63) Continuation of application No. 08/772,650, filed on Dec.
23, 1996, now Pat. No. 5,966,126.(51) Int. Cl.⁷ **G06F 13/00**(52) U.S. Cl. **345/348; 345/357**(58) Field of Search **345/326-356;
707/10**(56) **References Cited****U.S. PATENT DOCUMENTS**

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Primary Examiner—Steven Sax(57) **ABSTRACT**

A graphic user interface method for representing a search of a database, providing a plurality of stylized Venn diagrams each representing an intersection of at least two sets; receiving from the user, for each generic graphic icon, a selection of at least one region, defining an output data set; presenting the generic graphic icons on the graphic user interface as modified graphic icons, each having graphic indication of the selections; and receiving linkage information from the user for the modified graphic icons to represent a composite set inclusion property, based on the output data sets and the linkage information. Once a search is defined, it may be translated, as necessary, for execution by a typical database search engine. Retrieved results may be quantified and ranked by the interface system for optimal presentation to the user.

23 Claims, 16 Drawing Sheets